#### DOCUMENT RESUME

ED 428 302 CG 029 113

AUTHOR Esters, Irvin G.; Castellanos, Ellen F.

TITLE Time Management Behavior as a Predictor of Role-Related

Stress: Implications for School Counselors.

PUB DATE 1998-11-04

NOTE 8p.; Paper presented at the Annual Meeting of the Mid-South

Educational Research Association (27th, New Orleans, LA,

November 4-6, 1998).

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Academic Achievement; College Students; Coping; Counselor

Role; Higher Education; \*School Guidance; Self Management;

\*Stress Management; \*Time Management

IDENTIFIERS Time Management Behavior Scale

#### ABSTRACT

School counselors' roles can be described along a continuum from reactive to proactive. Whereas reactive services respond to crises, provide counseling, and provide other interventions, proactive services include programs provided with the intent to prevent problems before they occur. As increasing demands are placed on students, and as academic tasks become more complex, students' ability to manage time and stress becomes an essential component for academic success. The present study evaluated the utility of time management behaviors for predicting role-related stress among a student sample (N=116). Students enrolled in a college sophomore-level class completed a measure of time management behaviors and an index of role-related stress. Results suggest: (1) an inverse relationship between two factors comprising the Time Management Behavior Scale and role-related stress, as well as statistically significant yet substantively modest predictive utility for the factors; and (2) perceptions about control of time and preference for organization are predictors of role-related stress. The results are discussed relative to school-based counseling and role-related stress management. School counselors can use this information proactively in planning time and stress-management programs. (EMK)

Reproductions supplied by EDRS are the best that can be made

\* from the original document. \*

\*



Running head: TIME MANAGEMENT

Time Management Behavior as a Predictor of Role-Related Stress:

Implications for School Counselors

Irvin G. Esters and Ellen F. Castellanos

The University of Southwestern Louisiana

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this docu-ment do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

ESTERS

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

This study was prepared for presentation at the annual meeting of the Mid-South Educational Research Association, November 4-6, 1998. Address all correspondence to Irv Esters, The University of Southwestern Louisiana, P.O. Drawer 43091, Lafayette, LA 70504.

BEST COPY AVAILABLE



## **Abstract**

The present study evaluated the utility of time management behaviors for predicting role-related stress among a student sample. One hundred, sixteen students enrolled in a college sophomore-level class completed a measure of time management behaviors, and an index of role-related stress. Results suggest an inverse relationship between two factors comprising the Time Management Behavior Scale and role-related stress, as well as statistically significant, yet substantively modest predictive utility for the factors. The results are discussed relative to school-based counseling and role-related stress management.

# Time Management Behavior as a Predictor of Role-Related Stress: Implications for School Counselors

The various roles of the school counselor can be described along several dimensions, one such dimension being the reactive vs. proactive nature of the service offered. The former, reactive services, include such counselor activities as personal and group counseling, crisis management and other interventions which require the counselor to provide services as a reaction to some event or situation. The latter, proactive services include those counselor functions which the counselor performs preemptively. In other words, proactive services are provided so as to prevent problems before they occur. Such activities include large, class-sized group guidance in drug abuse education, training in conflict resolution, character education, and stress management. Proactive services delivered by the school counselor include programming designed to help students maximize their academic experiences. One area of particular interest to school counselors is time management.

Effective time management, especially as it pertains to academic pursuits, has been the focus of much research. Some authors suggest that time management skills have a direct impact on the relative academic success of college students (Britton & Tesser, 1991; Macan, 1996; Macan, Shahani, Dipboye, & Phillips, 1990). Poor time management has been associated with school-related tensions and feelings that one is less in control of time than is desired. These tensions and lack of control have also been found to be related to poor academic performance. The present study seeks to define the relationship between time-management behaviors and role-related anxiety and to evaluate the utility of time management behaviors as predictors of role-related anxiety.

Macan (1990) suggested that college students with good time management skills felt more in control of their time and felt fewer school related tensions. She also found that individuals who practice effective time management experience less role ambiguity and perceive that they perform better. She went on to say that individuals who practice effective time management are more clear about their roles and perceive that they achieve more when utilizing time management techniques. In other words, effective control of time, or perhaps the perception of effective control of time, is related to less role ambiguity.

In yet another study, Britton and Tesser (1991) examined the effects of time management skills on the academic performance of college students. They concluded that time management skills accounted for 36% of the variance among college grade point averages. Time management behaviors were related positively to GPA.

Students experiencing greater role demands and increased physical and psychological stress have reported less satisfaction with life and work (Macan, 1996). Rizzo, House, and



3

Lirtzman (1970) suggested that role ambiguity can increase the probability that individuals will experience dissatisfaction with their role, experience more anxiety, and perform less effectively. This idea is consistent with the belief that increased stress can lead to less satisfaction with other areas of a student's life.

As increasing demands are placed on students, and as academic tasks become evermore complex, students' ability to manage time and stress becomes an essential component for academic success. The present study will attempt to extend current research by further analyzing the relationship between time management and role-related stress, particularly by evaluating the utility of time management behaviors as predictors of role-related stress. Conclusions drawn from this study might be used to understand students' experiences with role-related stress and provide insight that may be used to develop new techniques of stress management for students of all ages.

#### Method

**Participants** 

The participants in the present study ( $\underline{n} = 116$ ) were selected based on their enrollment in an Introduction to Education course at a mid-sized state university in the south. The demographic data collected consisted of age, race, sex, college and high school GPA, ACT scores, and college major. The mean age of the participants was 22.8 years, ranging from 18 years to 58 years. Approximately 82% of the participants were less than 25 years old. Seventyfour percent of the participants were White, 22% were African-American, and 2% were Native American. The remaining participants were Asian-American or listed their race as "other." Seventy-eight percent of the participants were female, and 22% were male. High school and college GPAs were collected by self report. High school grade-point averages ranged from 1.20 to 4.00 on a four-point scale, with a mean of 3.10 and a standard deviation of .56. The distribution of college GPAs was similar, ranging from 1.70 to 4.0 on a four-point scale, with a mean of 2.76 and a standard deviation of .54. The mean ACT score for the group was 20.5 with a standard deviation of 3.15. The participants' majors in college were reported as 61.2% Elementary Education, 23.3% Secondary Education, and 7.8 % Health and Physical Education. The approximately 8% remaining were, Speech and Hearing, Special Education, or General Studies students.

## **Procedure**

A questionnaire, consisting of the Time Management Behavior Scale (TMBS; Macan, 1994), a measure of role overload, a measure of role ambiguity, and various questions designed to elicit demographic data, was administered to four sections of Introduction to Education. Students completed the questionnaire in their regularly scheduled Introduction to Education class in less than 40 minutes. Scores from the four factors which comprise the composite Time Management Behavior Scale were obtained from the completed questionnaires and constituted the predictor variables used in the regression analysis. Raw scores from two measures of role-related stress, role overload and role ambiguity were combined to yield a composite "role-related stress" score which served as the criterion variable in the regression analysis. Data were analyzed with the Statistical Package for the Social Sciences (SPSS) software for the personal computer. A full model regression analysis was completed with the four factor scores from the TMBS comprising the set of predictor variables, and the composite role-related stress score as the criterion variable.



Due to high intercorrelations among the predictor variables, which is an indicator of multicolinearity, a structure coefficient analysis, in addition to the regression analysis was performed to identify the unique contribution to predictive utility made by each variable.

#### Measures

The questionnaire administered to the students contained the Time Management Behavior Scale (Macan, 1994), several items by which to assess role overload, and several items to assess role ambiguity. The TMBS was designed to measure the multidimensional aspects of time management. Four factors were identified by Macan: Factor 1 — Setting Goals and Priorities (SGP), with a maximum possible raw score of 50, deals with setting goals and prioritizing tasks necessary to acheive those goals; Factor 2 — Mechanics of Time Management (MTM), with a maximum possible raw score of 55, assesses actual behaviors such as making lists and planning; Factor 3 — Perceived Control of Time (PCT), with a maximum possible raw score of 25, could be called a "time efficacy" measure in that it measures the extent to which one believes he controls his time; and Factor 4 — Preference for Organization (PO), with a maximum possible raw score of 40, measures one's preference for orderly workspaces, and organized approaches to various time consuming assignments. Coefficient alphas have been reported to be between .70 and .80 for SGP, MTM, and PCT. A somewhat lower alpha of .40 was reported for PO (Shahani, Weiner, & Streit, 1993)

Role ambiguity and role overload items were adapted from Beehr, Walsh, and Taber (1976) and from Rizzo, House, and Lirtzman (1970). The adaptations consisted of altering the language so that rather than reflecting worker concerns, the items would reflect specific student concerns. For example, one item appeared originally as, "The performance standards on my job are too high." This particular item was altered to read, "The performance standards in my classes are too high." Similar alterations to all of the items were made. Scores on the role ambiguity scale and scores on the role overload scale were added to provide an overall role-related stress scale.

#### Results

Descriptive statistics were computed for each of the factor scores on the TMBS as well as for Role Related Stress and are presented in Table 1. The hypothesis, that a statistically significant relationship exists between the four factor scores and the measure of role-related stress was tested using SPSS statistical software. A full-model regression analysis indicated that the relationship was indeed statistically significant ( $F_{(4,111)} = 8.80$ , p < .001). Regarding substantive significance, 24% of the variance in the criterion variable (role-related stress) was accounted for by variables in the regression model, leaving 76% unaccounted for. That is to say, taken together, the set of predictors consisting of the four factor scores from the TMBS was systematically related to role-related stress at a statistically significant level. Closer examination of the equation's beta weights and structure coefficients suggested that while only one beta weight was found to be statistically significant using an adjusted alpha of .01, two of the predictors, Perceived Control of Time (PCT) and Preference for Organization (PO), should be considered substantively significant based on the strength of their structure coefficients (see Table 2).



5

## Discussion

It would seem that a logical next step would be to train students in effective time management and measure the effects experimentally. This has, of course, been attempted with generally positive results (King, Winett, & Lovett, 1986; Orpen, 1993). Contrary to the popular opinion, though, Macan (1996) failed to find the benefits of time management training on work behavior and role-related stress. It should also be noted that Macan's study was superior to many of the others in research methodology.

The present study has implications for further research which differ from those previously mentioned. First the present study is concerned with students, not workers. Future research could focus on the effects of time management training specifically on high school or college students. Such information would undoubtedly be of interest to counselors working in the schools, especially when one considers that time management can be an issue in many tasks that comprise personal and academic well-being. Second, in the present study, Perceived Control of Time (PCT) and Preference for Organization (PO) turned out to be the only two variables in the prediction equation with a meaningful contribution to predictive utility. These variables are related inversely to role-related stress. That is to say when we observe perceived control of time scores and preference for organization scores increase, we might expect role-related stress scores to decrease systematically and vice versa. The contribution to the predictive utility made by Mechanics of Time Management (MTM) and Setting Goals and Priorities (SGP) was negligible, reaching neither statistical significance nor substantive significance. Does this suggest that students' perceptions that they have no control of their time, and their preference for organization in their oftentimes chaotic lives are the most likely causes of role-related stress? If so, what are the mediating effects of time management training that focuses on perceptions of control and organization skills on academic performance? Finally, can a causative relationship between certain elements of time management and role-related stress be defined and further developed to include academic performance? Perhaps, but these are questions to be answered by careful and systematic experimentation.

In summary, the present study suggests that perceptions about control of time and preference for organization are statistically and substantively significant predictors of role-related stress. School counselors can use this information to assist them in planning the proactive services they deliver, especially in structuring time management and stress management programs. Should the relationship described in the present study prove to be causative, counselors will have the information they need to design curriculum aimed at alleviating role-related stress among the students they serve.



#### References

Beehr, T. A., Walsh, J. T., & Taber, T. D. (1976). Relationship of stress to individually and organizationally valued states: Higher order needs as a moderator. <u>Journal of Applied Psychology</u>, 61, 41-47.

Britton, B. K., & Tesser, A. (1991). Effects of time management practices on college grades. <u>Journal of Educational Psychology</u>, 83, 405-410.

Macan, T. H. (1994). Time management: Test of a process model. <u>Journal of Applied Psychology</u>, 79, 381-391.

Macan, T. H. (1996). Time management training: Effects on time behaviors, attitudes, and job performance. <u>Journal of Psychology</u>, 130, 229-236.

Macan, T. H., Shahani, C., Dipboye, R. L., & Phillips, A. P. (1990). College students' time management: Correlations with academic performance and stress. <u>Journal of Educational Psychology</u>, 82, 760-768.

Rizzo, J., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. <u>Administrative Sciences Quarterly</u>, 15, 150-163.

Shahani, C., Weiner, R., & Streit, M. K. (1993). An investigation of the dispositional nature of the time management construct. Anxiety. Stress, and Coping. 6, 231-243.

Table 1.

Means and Standard Deviations for Predictor and Criterion Variables

	М	SD	Correlation with Role-Related Stress
Predictor Variables			
SGP	30.06	7.32	28*
MTM	33.12	8.48	25*
PCT	15.95	3.77	39*
PO	29.41	5.83	44*
Criterion Variable			
Role-Related Stress	29.59	6.63	

Note. n = 116 for all variables. Possible ranges for each factor are as follows: SGP: 10 - 50; MTM: 11 - 55; PCT: 5 - 25; PO: 8 - 40; Role-Related Stress: 11 - 55. Bonferonni's correction was used to adjust the level of significance ( $\alpha_{ADJ} < .01$ ). All Pearson product-moment correlations with Role-Related Stress are statistically significant.



Table 2.

Summary of Regression Analysis for Variables Predicting Role-Related Stress (n = 116)

	<u>B</u>	SE B	β	p calc beta = 0	Structure Coefficients
SGP	.13	.10	.14	.20	.57
MTM	.02	.09	.02	.83	.51
PCT	.34	.18	19	.06	.80
PO	.35	.12	31	.00	.90

Note. The statistical significance of observed t - values for each beta weight, tested independently, was adjusted using Bonferroni's correction ( $\alpha_{ADJ} < .01$ ). Table values were rounded to two decimal places for ease of reporting. Structure coefficients were calculated as follows:  $r_{ij}/R$ .





## U.S. Department of Education

Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



# REPRODUCTION RELEASE

	(Specific Document)	- <del>-</del>
I. DOCUMENT IDENTIFICATION		
Title: Time Management Beha	vior as a Predictor of Role. for School Conuselors	-Related Stress;
Amplications	for School Comuselors	
Author(s): Irvin G. Esters and	Ellen F. Castellanos	
Corporate Source: The University	y of Southwestern Cousiar	Publication Date:
		NOV 4, 1998
II. REPRODUCTION RELEASE:		·
monthly abstract journal of the ERIC system, Res and electronic media, and sold through the ERIC reproduction release is granted, one of the following	timely and significant materials of interest to the eduction representation (RIE), are usually made available. Document Reproduction Service (EDRS). Crediting notices is affixed to the document.  minate the identified document, please CHECK ONE or an armonic representation.	le to users in microfiche, reproduced paper copy is given to the source of each document, and, i
The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to all Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY  TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
1	2A .	2B
Level 1	Level 2A	Level 2B
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.	Check here for Level 2A release, permitting reproduction and disseministion in microfiche and in electronic media for ERIC archival collection subscribers only	Check here for Level 2B release, permitting reproduction and dissemination in microfiche only
Documer If permission to rep	nts will be processed as indicated provided reproduction quality per roduce is granted, but no box is checked, documents will be proces	nits. sed at Level 1.
as indicated above. Reproduction from contractors requires permission from the to satisfy information needs of educator.	ces Information Center (ERIC) nonexclusive permissing the ERIC microfiche or electronic media by perso copyright holder. Exception is made for non-profit reposition in response to discrete inquiries.	ns other than ERIC employees and its system

ERIC

\*Full Text Provided by ER

Sign here,→

\_\_\_

Organization/Address: U. Of SW. LA, Dept of Ed Fouts Eldred

P.O. Drawer 43091, Lafayette LA

# III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:
IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:
If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:
Name:
Address:
V. WHERE TO SEND THIS FORM:
Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2<sup>nd</sup> Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com

F-088 (Rev. 9/97)
PHEVIOUS VERSIONS OF THIS FORM ARE ORSOLETE